

IN THE CLAIMS

1-22. (Canceled)

23. (Currently Amended) A method of forming a vehicle design index, comprising:

providing a plurality of computerized design tools, ~~each~~ at least some of which tools stores information restricted to viewing by a respective limited group of workers, which workers are assigned to a different system of the vehicle;

gathering, by a computer, from the plurality of computerized design tools, information on elements of the different systems of the vehicle, wherein the gathering includes retrieving from at least one of the computerized tools information on fewer than all the elements of the vehicle described by the tool;

storing the information in the index; and

opening the index for viewing by workers of all the groups of workers,

wherein storing the information in the index comprises storing only information which is authorized for viewing by workers of the company from all of the groups of workers.

24. (Previously Presented) A method according to claim 23, wherein gathering the information comprises gathering location information of the elements.

25. (Previously Presented) A method according to claim 23, wherein gathering the information comprises gathering interconnection information of the elements.

26. (Previously Presented) A method according to claim 23, wherein gathering the information comprises gathering references to documents describing the elements.

27-29. (Canceled)

30. (Previously Presented) A method according to claim 23, wherein gathering the information comprises gathering information on elements of an aircraft.

31. (Previously Presented) A method according to claim 23, wherein gathering the information comprises gathering the information periodically.

32. (Previously Presented) A method of providing information between workers designing a vehicle, comprising: providing a plurality of different types of computerized design tools, each having stored therein sufficient information for carrying out a design task of a respective system of the vehicle, the tools including at least a hydraulic design tool storing hydraulic design information and an electrical design tool storing electrical design information;

gathering, for each of a plurality of elements of the vehicle, information regarding the element, including an indication of the relative assembly of the element and a reference to a worker in charge of the element;

storing the gathered information in a database having a record for each of the plurality of elements, wherein the database includes information from each of said design tools, said information including only a subset of said hydraulic design information and said electronic design information;

opening the database for viewing by workers of a plurality of departments, assigned to different systems or disciplines of the vehicle;

searching the database, by a first worker assigned to one system or discipline of the vehicle, for information on one or more of the elements; and

performing at least one of:

displaying information relating to the one or more elements; and

sending an electronic message, by the first worker, to a second worker assigned to another system or discipline of the vehicle, based on information found in the search.

33. (Previously Presented) A method according to claim 32, wherein gathering the information comprises gathering references to documents related to the elements.

34. (Previously Presented) A method according to claim 32, wherein the indication of the relative assembly of the element comprises at least one indication of the location of the element.

35. (Original) A method according to claim 34, wherein the at least one indication of the location of the element comprises an indication of the coordinates of the element within the vehicle.

36. (Previously Presented) A method according to claim 34, wherein the at least one indication of

the location of the element comprises an indication of an access door to the element within the vehicle.

37. (Previously Presented) A method according to claim 34, wherein the at least one indication of the location of the element comprises an indication of a compartment in which the element is located.

38. (Previously Presented) A method according to claim 32, wherein the indication of the relative assembly of the element comprises a list of elements with which the element is connected.

39. (Previously Presented) A method according to claim 32, wherein the indication of the relative assembly of the element comprises an indication of a system to which the element belongs.

40. (Previously Presented) A method according to claim 39, wherein the indication of the system to which the element belongs comprises an indication of a function of the element within the system.

41. (Previously Presented) A method according to claim 72, comprising running a verification routine which finds design faults, on the data contained within the database.

42. (Original) A method according to claim 41, wherein running the verification routine comprises running a routine which checks for elements which are distanced from each other less than a minimal allowed distance.

43. (Previously Presented) A method according to claim 32, wherein the database does not include diagrams or drawings.

44. (Canceled)

45. (Currently Amended) A method of labeling major elements of an aircraft, comprising:
providing a working environment including a plurality of different departments, assigned to perform design tasks of respective different aircraft systems;
selecting substantially all the elements of the aircraft that are handled by a plurality of

personnel from different departments, to serve as major elements that represent the aircraft;
determining for each major element a system to which the element belongs;
assigning each of the major elements with a code which is unique to each occurrence of the element in the aircraft, responsive to the system to which the element belongs; and
storing records identifying the major elements in a database using the assigned codes in a database.

46. (Original) A method according to claim 45, wherein the major elements include elements belonging to the structure of the aircraft.

47. (Previously Presented) A method according to claim 45, wherein assigning the code comprises assigning a code having at least three digits in common with digits of a part number of the element, for most of the major elements of the aircraft.

48. (Previously Presented) A method according to claim 45, wherein assigning the code comprises assigning a plurality of codes to at least one single element.

49. (Original) A method according to claim 48, wherein the plurality of codes assigned to the at least one single element comprise codes which represent connection ends of the element.

50. (Currently Amended) A method of referencing workers working on an aircraft, comprising:

providing a working environment including a plurality of different departments, assigned to perform design tasks of respective different aircraft systems;

assigning configuration management codes to various systems of the aircraft;

assigning each part of the aircraft, a part number code which includes the assigned configuration management code of the system to which the part belongs;

generating worker codes which include the configuration management code of the system on which the worker works in designing the aircraft; and

storing records identifying the workers in a database using the assigned codes in a database.

51. (Original) A method according to claim 50, wherein the configuration management codes

comprise three digits.

52. (Previously Presented) A method according to claim 50, comprising preparing a responsibility matrix which references workers by the assigned worker codes.

53. (Previously Presented) A method according to claim 32, wherein gathering the information comprises gathering a plurality of different indications of the relative assembly of the element.

54. (Previously Presented) A method according to claim 32, wherein gathering the information comprises gathering at least three levels of a hierarchy of systems and sub-systems to which the major elements belong.

55. (Previously Presented) A method according to claim 32, wherein gathering for each of a plurality of elements comprises gathering only for elements which are related to by a plurality of different computerized design tools.

56. (Previously Presented) A method according to claim 32, wherein the indication of the relative assembly comprises an indication in each record of elements which are functionally related to the element described by the record.

57. (Previously Presented) A method according to claim 32, wherein storing the gathered information in the database comprises storing in a database having a total storage space of less than 1Gbyte.

58. (Previously Presented) A method according to claim 57, wherein storing the gathered information in the database comprises storing in a database having a total storage space of less than 100Mbytes.

59. (Previously Presented) A method according to claim 32, wherein gathering for each of a plurality of elements comprises gathering for fewer than 10% of the physical elements of the vehicle, described by the computerized design tools.

60. (Previously Presented) A method according to claim 33, wherein the references to the documents comprise hypertext links.
61. (Previously Presented) A method according to claim 33, wherein the references to the documents comprise references to diagrams including the elements.
62. (Previously Presented) A method according to claim 33, wherein the references to the documents comprise references to procurement invoices of the elements.
63. (Previously Presented) A method according to claim 32, wherein each of the elements is identified in the database by a unique code which is assigned according to a functionality of the element.
64. (Previously Presented) A method according to claim 32, wherein gathering the information comprises gathering from at least one computerized tool such that an update of information in the at least one computerized tool automatically updates the database.
65. (Previously Presented) A method according to claim 64, wherein changing the content of the index is allowed only through the gathering from the computerized tools.
66. (Previously Presented) A method according to claim 32, comprising incorporating output information of at least one data evaluation program into the database.
67. (Previously Presented) A method according to claim 66, wherein the at least one data evaluation program comprises a design-to-cost program.
68. (Previously Presented) A method according to claim 66, wherein the at least one data evaluation program comprises a design-for-manufacture-and-assembly program.
69. (Previously Presented) A method according to claim 32, wherein storing the information comprises storing on a portable computer.
70. (Previously Presented) A method according to claim 32, wherein the database is open for

viewing by all workers working on the vehicle, while changing the database is allowed only to specific workers responsible for changing the database.

71. (Previously Presented) A method according to claim 32, comprising viewing in the database, by a worker, information on systems of the vehicle other than the worker is responsible for.

72. (Currently Amended) A method of providing information between workers designing a vehicle, comprising:

- providing a working environment including a plurality of different departments, assigned to perform design tasks of respective different vehicle systems;

- selecting a plurality, but fewer than 10%, of the physical elements of each system of the vehicle to serve as major elements of the vehicle;

- gathering, for each of the major elements, information regarding the element, including an indication of the relative assembly of the element in the vehicle and a reference to a worker in charge of the element;

- storing the gathered information in a database, having records only for the major elements;

- searching the database for information on one or more of the major elements; and

- performing at least one of:

- displaying information relating to the one or more major elements; and

- sending an electronic message to a worker in charge of the element based on information found in the search.

73. (Previously Presented) A method according to claim 72, wherein gathering the information comprises gathering at least three levels of a hierarchy of systems and sub-systems to which the major elements belong.

74. (Previously Presented) A method according to claim 72, wherein selecting the major elements comprises selecting fewer than 1% of the physical elements of the vehicle.

75. (Previously Presented) A method according to claim 23, wherein the index is open for viewing by all workers working on the vehicle, while changing the index is allowed only to workers responsible for changing the data of the index.

76. (Previously Presented) A method according to claim 23, wherein gathering the information comprises gathering information on both electrical and mechanical elements.

77. (Previously Presented) Apparatus for forming a vehicle design index, comprising:

a memory for storing the index; and

a computer configured to gather, from a plurality of computerized design tools, each of the tools adapted for designing a different system of a vehicle by performing a plurality of design tasks, information on fewer than all the elements of the vehicle described by the tool, such that the gathered information does not include sufficient information for at least some of said design tasks for which the computerized design tools are adapted, and to store the gathered information in the memory.

78. (Canceled)

79. (Previously Presented) A method according to claim 23, wherein the index is restricted for viewing only by workers of the company.

80. (Previously Presented) A method according to claim 23, comprising initiating communication between workers designing the vehicle using different computerized tools, using information in the index.

81. (Previously Presented) A method according to claim 23, wherein gathering information on elements of the vehicle comprises gathering general information authorized for viewing by workers of the company from a plurality of departments on elements having some details restricted to viewing by a limited group of workers.

82. (Currently Amended) A method, comprising:

providing computerized design tools of different systems of the vehicle;

designing the vehicle by workers using the computerized design tools;

generating a database including information on the relationship between elements of the vehicle from different systems, but including information on fewer than all the elements of the vehicle;

opening the database for viewing by workers of a plurality of departments, assigned to

different systems of the vehicle;

~~contemplating, by one of the workers, to change an element of the vehicle;~~

determining from the database, by one of the workers, which elements of systems other than the system to which the worker is assigned, are directly affected by ~~the contemplated~~ possible change in an element of the vehicle; and

performing at least one of:

displaying information relating to the one or more major elements; and

sending an electronic message to workers in charge of the elements determined to be affected by the change, to discuss the ~~eontemplated~~ possible change.

83. (Previously Presented) A method according to claim 82, wherein generating the database comprises generating a database including less than 10% of the elements of the vehicle, described by the design tools.

84. (Previously Presented) A method according to claim 82, wherein generating the database comprises generating a database not including sufficient information to allow performing all the design tasks of the vehicle, which can be performed by the computerized tools.

85. (Previously Presented) A method according to claim 82, wherein contacting workers in charge of the elements comprises determining the identities of the contacted workers, from the database.

86. (Currently Amended) A method of providing information between workers designing a vehicle, comprising:

providing a working environment including a plurality of different departments, assigned to perform design tasks of respective different vehicle systems or disciplines;

selecting fewer than 10% of the physical elements of each of the systems of the vehicle to serve as major elements of the vehicle;

gathering, for each of the major elements, information regarding the element, including an indication of a relative assembly of the element in the vehicle and a reference to a worker in charge of the element;

storing the gathered information in a database, having records only for the major elements;

managing in the database, for each selected element, an action item list including listings

of at least one of actions related to the element which need to be performed or which were performed;

opening the database for viewing by workers of a plurality of departments, assigned to different systems or disciplines of the vehicle;

searching the database for information on one or more of the major elements, which may be affected by a ~~contemplated~~ possible change to the designed vehicle;

contacting a worker in charge of the element based on information found in the search;

and

discussing with the contacted worker the proposed change; ~~and~~

~~deciding whether to perform the change following the discussion.~~